

This listing of claims will replace all prior versions and listings of claims in the application:

IN THE CLAIMS

Claim 1 (currently amended): A method for monitoring and, ~~possibly, for~~ controlling ~~the~~ a transmission capacity of a data transmission path which exists between two data devices and is used for transmitting data signals, ~~in particular data signals~~, and on which a primary channel with a relatively low transmission capacity is used, whose magnitude ~~possibly~~ depends on influences which are outside the control of the two data devices, and which can be replaced or added to by ~~means of~~ one or more secondary channels having a relatively high transmission capacity, comprising:

~~with~~ emitting test signals ~~being transmitted~~ at specific times or periodically via the primary channel, where a ~~with the~~ delay time with which ~~these the~~ test signals are transmitted ~~being is~~ determined; ;

~~and with~~ emitting a signal which indicates that the primary channel is overloaded ~~being emitted~~ if a specific threshold value is exceeded and ; ~~in response to which~~

activating at least one secondary channel ~~can be activated~~ for signal transmission, wherein

characterized

~~in that said the~~ delay time is determined in that, in response to ~~the emission~~ of emitting the test signals, a response signal is ~~in each case~~ sent back from ~~at least a~~ first one of the two data devices (~~PC, COC; POP~~) via the primary channel of the data transmission path (~~D, TL1, TL2~~) to ~~the other~~ a second of the two data ~~device~~ devices (~~POP~~) from ~~this said the other first~~ data device (~~POP; PC, COC~~) in response to ~~the reception of~~ receiving the relevant test signals, to the first data device (~~PC, COC; POP~~) via the primary channel of the data transmission path (~~D, TL1, TL2~~), which response signal either comprises the respective test signal ~~itself~~, or is a separate signal which is thereby initiated ~~by it~~,

~~□ in that the~~ a time interval between the transmission of a test signal by the first data device (~~PC, COC; POP~~) and the arrival of a response signal which is sent back to it thereto from the ~~other~~ second data device (~~POP; PC, COC~~) is compared with a predetermined threshold value time, which corresponds to a specific current transmission capacity of the primary channel of the data transmission path (~~D, TL1, TL2~~), forming a comparison result, in response to which a transmission capacity signal is formed, which corresponds to this the comparison result and which can be used to activate ~~of~~ at least one secondary channel for signal transmission,

~~□ in that the~~ monitoring of the transmission capacity is carried out deliberately, before transmission of the relevant data, when an amount of data is present which exceeds a defined amount threshold value and is to be transmitted by the first data device (~~PC, COC; POP~~) to said ~~other~~ second data device (~~POP; PC, COC~~),

~~□ in that the time of the start of~~ starting deliberate monitoring of the transmission capacity of said data transmission path (~~D, TL1, TL2~~) is used as ~~the a~~ point of origin for regular monitoring of the transmission capacity of the relevant data transmission path (~~D, TL1, TL2~~) at time intervals ~~of t~~ thereof and,

~~□ and in that~~ no further deliberate monitoring of the transmission capacity of said data transmission path (~~D, TL1, TL2~~) is carried out in a situation in which the time period ~~d_{akt}~~ which has passed since the last monitoring of the transmission capacity is shorter than a defined time period ~~d_{min}~~.

Claim 2 (currently amended): The method as claimed in claim 1, ~~characterized in that~~ wherein the transmission of the respective test signal activates a timer (~~TIM~~) which emits an output signal once a defined time interval has elapsed,

and ~~in that~~, if the relevant output signal occurs before the arrival of said response signal, a transmission capacity signal is emitted which indicates an overload state on said data transmission path (~~D, TL1, TL2~~).

Claim 3 (currently amended): The method as claimed in claim 1, ~~characterized in that~~ wherein the signals which are associated with a communication between the two data devices (~~PC, COC; POP~~) which is necessary for connection of a secondary channel are sent at ~~the an~~ earliest possible time, and ~~in particular~~ are transmitted with priority over existing data.

Claim 4 (currently amended): The method as claimed in ~~one of claims~~ claim 1, ~~characterized in that~~ wherein, in an integrated service digital network (~~ISDN~~) in which a switched virtual channel (~~Switched Virtual Circuit~~) which in places runs within a D channel is used as the primary channel and at least one B channel is used as the secondary channel, message signals for a bandwidth allocation protocol are used to allocate the bandwidth and transmission capacity to be used before setting up a B channel, and is transmitted with priority over other data.

Claim 5 (currently amended): The method as claimed in claim 4, ~~characterized in that~~ wherein the message signals EchoRequest and EchoReply of an Internet link control protocol are used as the test signal and response signal, respectively.

Claim 6 (currently amended): ~~A circuit arrangement having means for carrying out the method~~ The method as claimed in claim 1, wherein as claimed in one of claims 1, ~~characterized in that~~ a first one of the at least ~~one of~~ two data devices (~~PC, COC; POP~~) which are connected to one another via a data transmission path (~~D, TL1, TL2~~) has an associated

monitoring device (~~SIG, PRC~~), which allows a time comparison to be carried out between a measurement time interval from the emission of a test signal from ~~the a~~ relevant data device (~~SUB~~) to the ~~other~~ second data device (~~POP; PC, COC~~) until the arrival of a response signal from ~~this other~~ second data device (~~POP; PC, COC~~) with a predetermined threshold value time (~~T1~~),

and ~~in that~~ the relevant monitoring device (~~SIG, PRC~~) can emit a transmission capacity signal which corresponds to the respective time comparison result, in particular a report signal which indicates an overload state on the data transmission path (~~D, TL1, TL2~~), if said measurement time interval exceeds the relevant threshold value time.

Claim 7 (currently amended): ~~The circuit arrangement~~ The method as claimed in claim 6, ~~characterized in that~~ wherein a timer (~~TIM~~) is connected to said monitoring device (~~SIG, PRC~~), which can be activated by said test signal, and emits an output signal to the relevant monitoring device (~~SIG, PRC~~) once its operating time, which corresponds to an overload state of said data transmission path (~~D, TL1, TL2~~), has elapsed, ~~which the~~ monitoring device (~~SIG, PRC~~) ~~uses~~ using this output signal, if the response signal from said ~~other~~ second data device (~~POP; PC, COC~~) has not yet arrived, to emit a report signal which indicates the overload state of the data transmission path (~~D, TL1, TL2~~).